Roland

STIKA
DESIGN CUTTER

SX-15/12/8

USER'S MANUAL

This User's Manual is intended for SX-15, SX-12 and SX-8.

Thank you very much for purchasing the SX-15/12/8.

- To ensure correct and safe usage with a full understanding of this product's performance, please be sure to read through this manual completely and store it in a safe location.
- Unauthorized copying or transferral, in whole or in part, of this manual is prohibited.
- The contents of this operation manual and the specifications of this product are subject to change without notice.
- The operation manual and the product have been prepared and tested as much as possible. If you find any misprint or error, please inform us.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur through use of this product, regardless of any failure to perform on the part of this product.
- Roland DG Corp. assumes no responsibility for any direct or indirect loss or damage which may occur with respect to any article made using this product.

Roland DG Corporation

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

The I/O cables between this equipment and the computing device must be shielded.

For Canada

CLASS A NOTICE

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

CLASSE A AVIS

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

ROLAND DG CORPORATION
1-6-4 Shinmiyakoda, Hamamatsu-shi, Shizuoka-ken, JAPAN 431-2103
MODEL NAME : See the MODEL given on the rating plate.
RELEVANT DIRECTIVE : EC LOW VOLTAGE DIRECTIVE (73/23/EEC)
EC ELECTROMAGNETIC COMPATIBILITY DIRECTIVE (89/336/EEC)

How to Read This Document

This document is organized as follows.

Part 1 Getting Started
This describes the preparations to make before you use the SX-15/12/8.
Read through this before you use the SX-15/12/8.

Part 2 Performing Cutting
This describes the basic steps for cutting.
Read through this when you're using the SX-15/12/8 for the first time.

Part 3 Mastering the SX
This describes features for further mastering use of the SX-15/12/8.

Part 4 User's Reference
This describes care, maintenance, and troubleshooting for the SX-15/12/8, and also contains the specifications of the SX-15/12/8.

The illustrations appearing in this manual depict the SX-15. The SX-12 and SX-8 may differ from the product shown.

For information about how to use the included Dr. STIKA PLUS program, see the PDF manual for Dr. STIKA PLUS on the Roland Software Package CD-ROM, or refer to the program's help screens.

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To Ensure Safe Use

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

	The △ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. The symbol at left means "danger of electrocution."
	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. The symbol at left means the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. The symbol at left means the power-cord plug must be unplugged from the outlet.

⚠WARNING

Do not disassemble, repair, or modify.
Doing so may lead to fire or abnormal operation resulting in injury.

Ground the unit with the ground wire.
Failure to do so may result in risk of electrocution in the event of a mechanical problem.

Do not use with any power supply other than the dedicated AC adapter.
Use with any other power supply may lead to fire or electrocution.

Do not use with any electrical power supply that does not meet the ratings displayed on the AC adapter.
Use with any other power supply may lead to fire or electrocution.

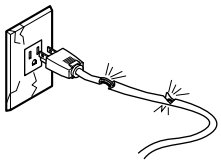
Do not use while in an abnormal state (i.e., emitting smoke, burning odor, unusual noise, or the like).
Doing so may result in fire or electrocution. Immediately unplug the power-cord plug from the electrical outlet, and contact your authorized Roland DG Corp. dealer or service center.

Use only with the power cord included with this product.
Use with other than the included power cord may lead to fire or electrocution.

⚠CAUTION

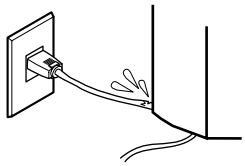
Do not use with a damaged AC adapter, power cord, or power-cord plug, or with a loose electrical outlet.

Doing so may lead to fire, electrical shock, or electrocution.



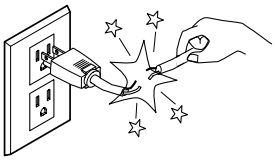
Do not damage or modify the electrical power cord, subject it to excessive bending, twisting, pulling, binding, or pinching, or place any object or weight on it.

Doing so may damage the electrical power cord, leading to fire, electrical shock, or electrocution.



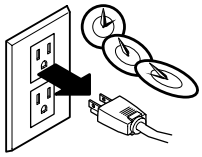
When unplugging the electrical power cord from the power outlet, grasp the plug, not the cord.

Unplugging by pulling the cord may damage it, leading to fire, electrical shock, or electrocution.



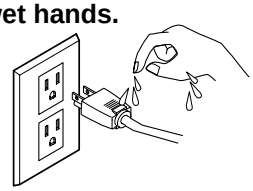
When not in use for several hours, unplug the power-cord plug from the electrical outlet.

Failure to do so may result in danger of electrical shock, electrocution, or fire due to deterioration of electrical insulation.



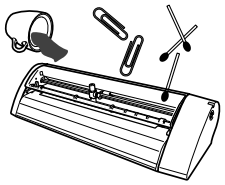
Do not attempt to unplug the power-cord plug with wet hands.

Doing so may result in electrical shock or electrocution.



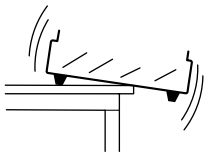
Do not allow liquids, metal objects or flammables inside the machine.

Such materials can cause fire.



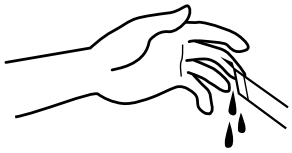
Install on a stable surface.

Failure to do so may result in the unit tipping over, leading to injury.



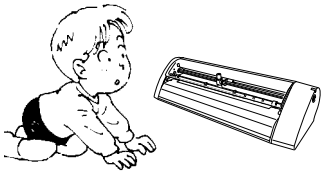
Do not touch the tip of the blade with your fingers.

Doing so may result in injury.



Do not allow children to operate without adult supervision or operate within reach of young children.

Doing so may result in injury.

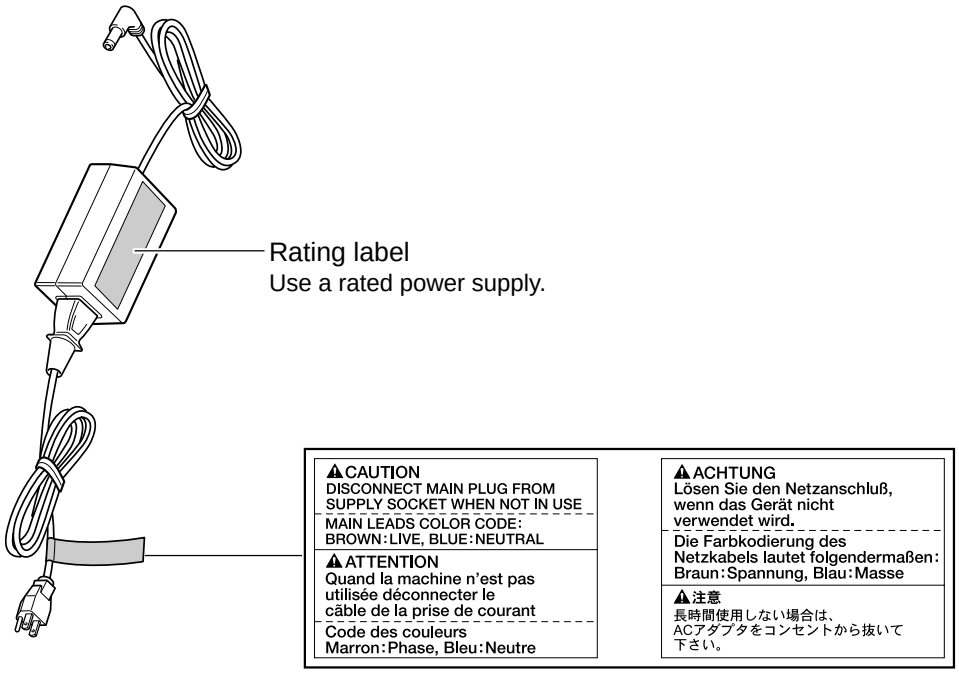


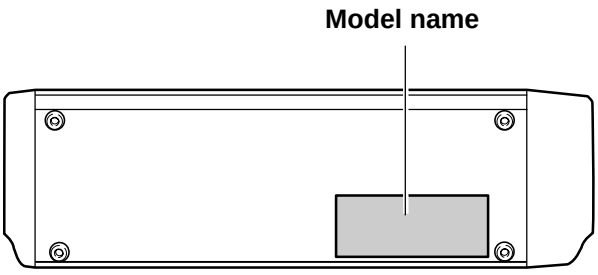
When using a commercially available cutter knife for replacing the blade protector, do not place the hands anywhere along the path in the direction of blade movement.

Doing so may result in injury.

About the Labels Affixed to the Unit

These labels are affixed to the body of this product.
The following figure describes the location and content of these messages.





In addition to the ⚠**WARNING** and ⚠**CAUTION** symbols, the symbols shown below are also used.

NOTICE : Indicates information to prevent machine breakdown or malfunction and ensure correct use.

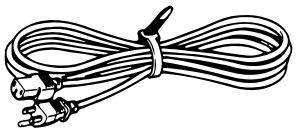
: Indicates a handy tip or advice regarding use.

Part 1 Introduction

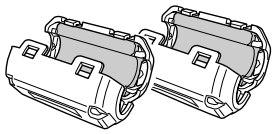
1.1 Checking Accesories

Check the following to make sure that you received all the items that were shipped along with the unit.

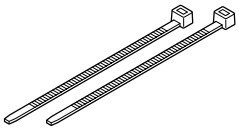
AC adapter : 1



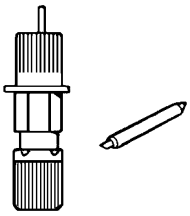
Power cord : 1



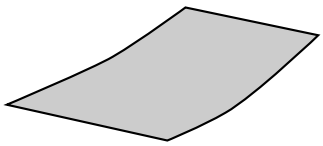
Ferrite cores : 2



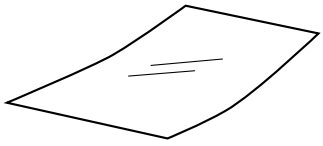
Cable ties : 2
* For securing ferrite cores.



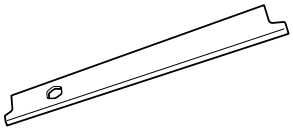
Blade holder/Blade : 1
*This blade holder and blade are installed on the unit when shipped from the factory.



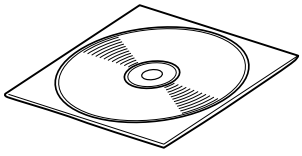
Material for test cuts : 1



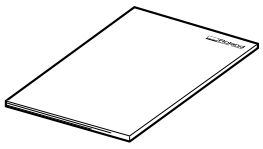
Application tape for test cuts : 1



Replacement blade protector : 1
*The configuration differs according to the model.



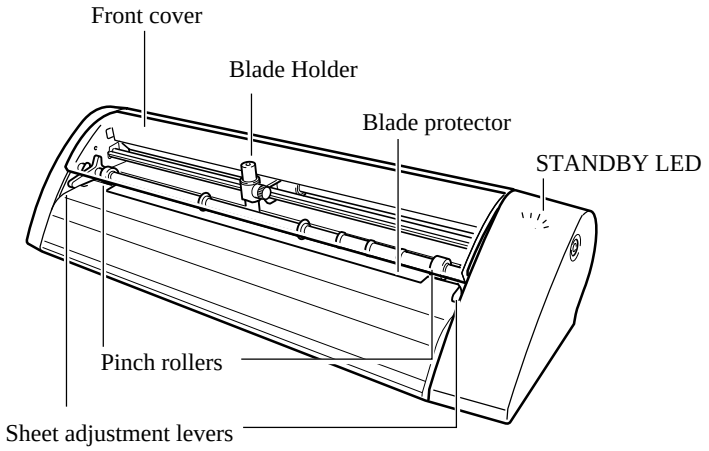
Roland Software Package CD-ROM: 1



SX-15/12/8 User's Manual : 1

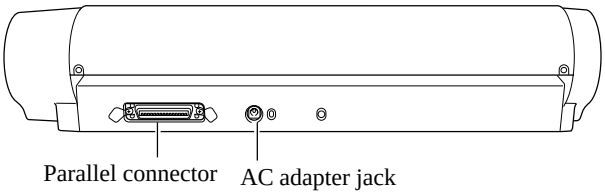
1.2 Part Names

Front View

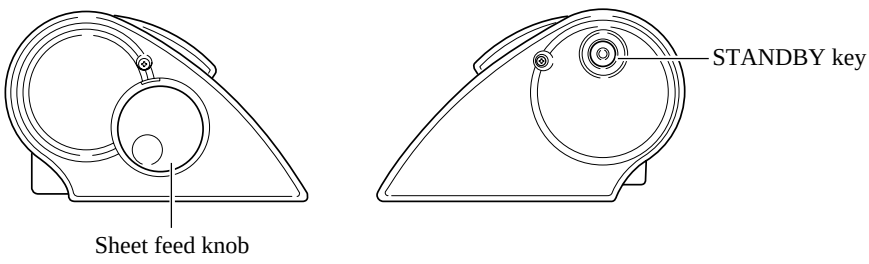


* The SX-15 has sheet adjustment levers on the left and right, and the SX-12 has a sheet adjustment lever only on the right. The SX-8 has none.

Rear View



Side View



1.3 Setting Up the SX

⚠WARNING

Ground the unit with the ground wire.
Failure to do so may result in risk of electrocution in the event of a mechanical problem.

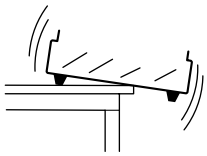
Do not use with any power supply other than the dedicated AC adapter.
Use with any other power supply may lead to fire or electrocution.

Do not use with any electrical power supply that does not meet the ratings displayed on the AC adapter.
Use with any other power supply may lead to fire or electrocution.

Use only with the power cord included with this product.
Use with other than the included power cord may lead to fire or electrocution.

⚠CAUTION

Install on a stable surface.
Failure to do so may result in the unit tipping over, leading to injury.



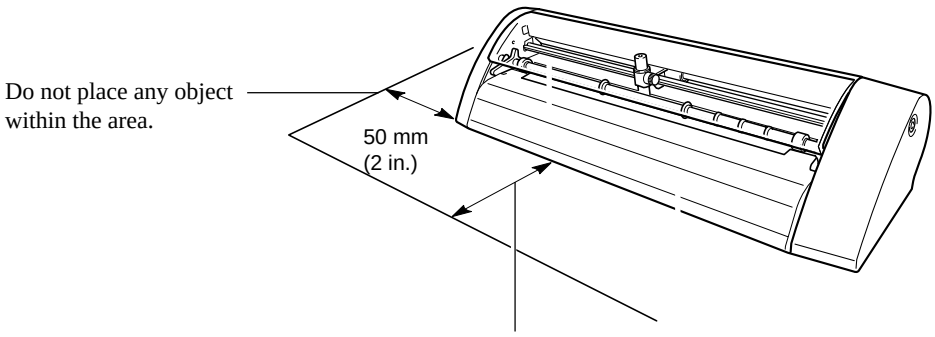
NOTICE

Never install this unit in any of the following situations, as it could result in damage:
- Places where the installation surface is unstable or not level.
- Places with excessive electrical noise.
- Places with excessive humidity or dust.
- Places with poor ventilation, because the SX-15/12/8 generates considerable heat during operation.
- Places with excessive vibration.

Use within a temperature range of 5 to 40°C (41 to 104°F) and within a humidity range of 35 to 80%.

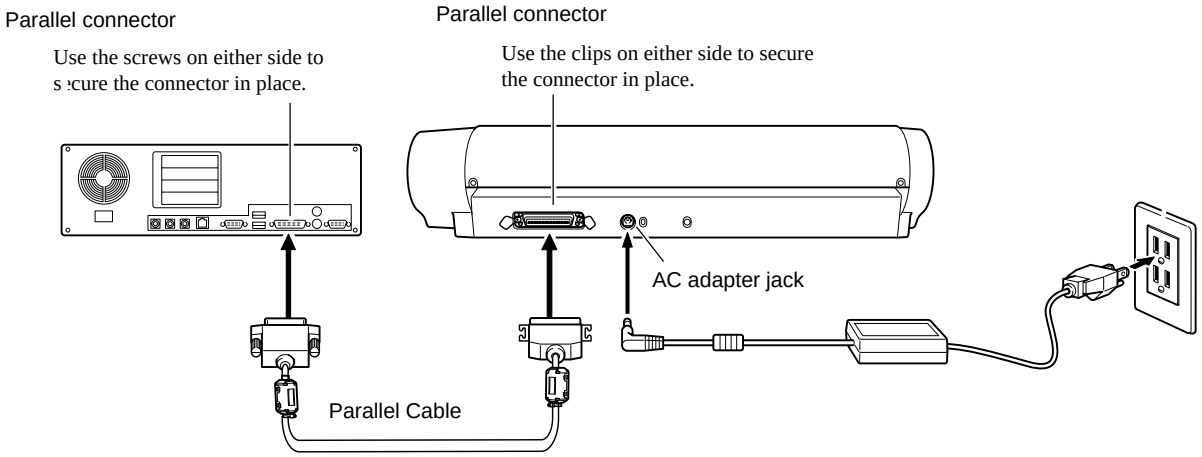
Make sure the power to the computer and the SX-15/12/8 is switched off before attempting to connect the cables.
Securely connect the power cord, computer I/O cable and so on so that they will not be unplugged. Otherwise, faulty operation or breakdown may result.

Installation Space



When cutting starts, the material moves forward and backward.
Do not place any objects within the area in which the material moves during cutting.

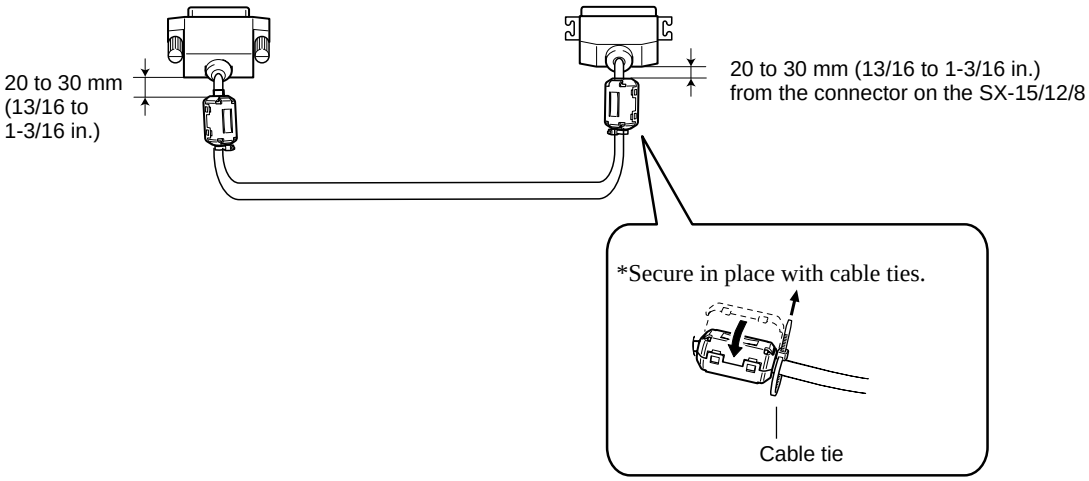
Connecting the Cables


Parallel connector
Use the screws on either side to secure the connector in place.
Parallel connector
Use the clips on either side to secure the connector in place.
AC adapter jack
Parallel Cable

The cable is available separately.
Be sure to use the correct cable for the computer.

Attaching the ferrite cores

Attach the included ferrite core at the location on the connection cable shown in the figure.


20 to 30 mm (13/16 to 1-3/16 in.)
20 to 30 mm (13/16 to 1-3/16 in.) from the connector on the SX-15/12/8
*Secure in place with cable ties.
Cable tie

1.4 Installing and Setting Up the Included Software

System Requirements

- Microsoft® Windows® 95, Windows 98, Windows Me, Windows NT® 4.0, or Windows 2000 operating system
- The minimum required CPU for the operating system (Pentium® or higher recommended)
- The minimum amount of required RAM for the operating system (32 Mbytes or more recommended)
- 5 Mbytes or more of free hard disk space for installation

The Basics of Windows

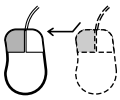
Mouse operation

Pointing
When you move the mouse, the on-screen arrow (mouse pointer) also moves. Moving the mouse pointer to line up the tip of the pointer with an item on the screen is called "pointing."

Click
Press and release the left mouse button.

Click the right mouse
Press and release the right mouse button.

Drag
Move the mouse while holding down the mouse button.



Double click
Rapidly press and release the left mouse button two times.

Installing and Setting Up Dr. STIKA PLUS and the Driver

The explanations in this manual assume that you are already familiar with the basic operation of Windows.

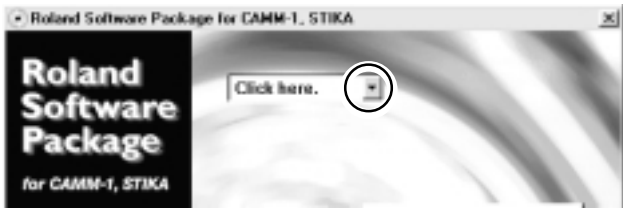
* If you are installing under Windows NT 4.0/2000, you need full access permissions for the printer settings.
Log on to Windows as a member of the “Administrators” or “Power Users” group.
For more information about groups, refer to the documentation for Windows.

1 Make sure the power to the SX-15/12/8 is turned off.

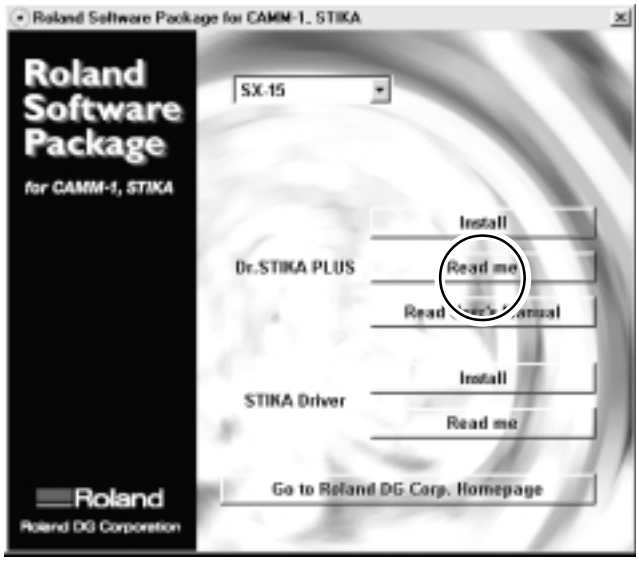
2 Switch on the computer and start Windows.
If you are installing under Windows NT 4.0/2000, log on to Windows as a member of the “Administrators” or “Power Users” group.

3 Place the CD from the Roland Software Package in the CD-ROM drive.
The Setup menu appears automatically.

4 When the screen at right appears, click the drop-down arrow for [Click here] and choose the name of the model you're using.
For the SX-15, choose [SX-15].
For the SX-12, choose [SX-12].
For the SX-8, choose [SX-8].

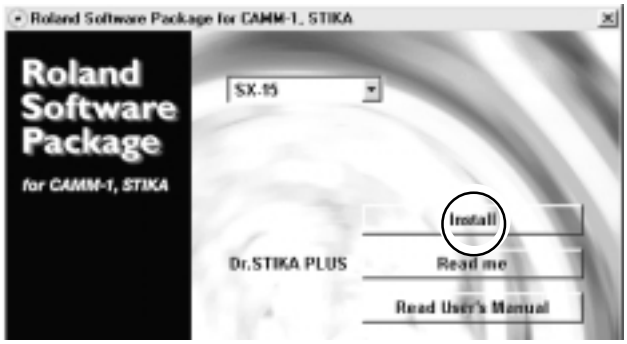


5 Before installing and setting up, click [Read me] for each piece of software and read the information displayed.

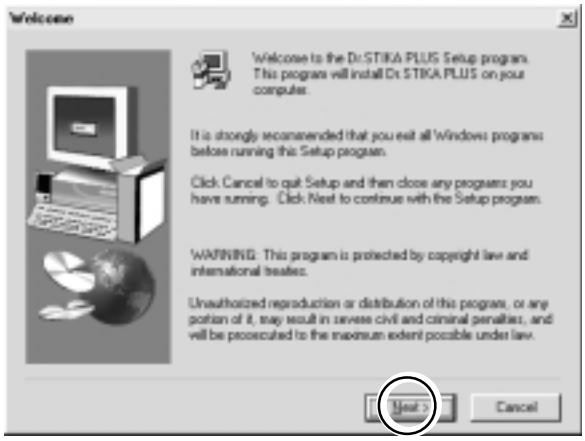


Continued on the next page

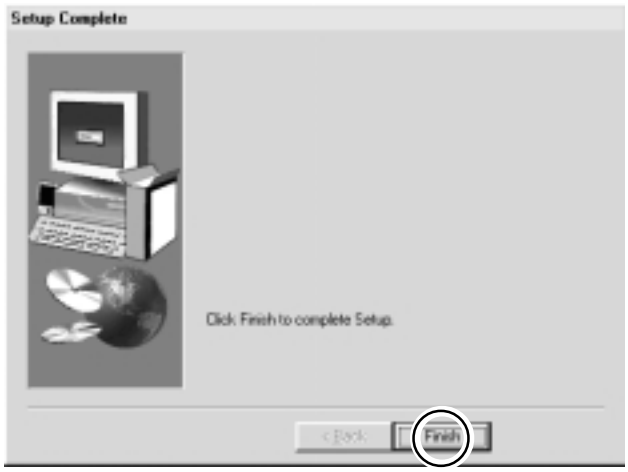
6 For [Dr. STIKA PLUS], click [Install].
The Setup program starts.



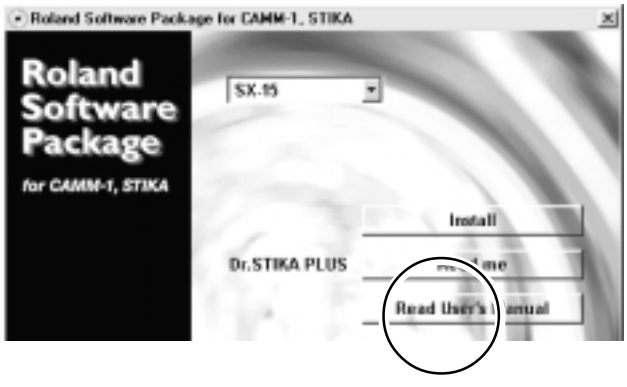
7 Click [Next], then follow the messages to continue setting up the program.


Welcome
Welcome to the Dr.STIKA PLUS Setup program.
This program will install Dr.STIKA PLUS on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

8 When installation finishes, the screen shown at right appears.
Click [Finish], and finish installing the Dr.STIKA PLUS.



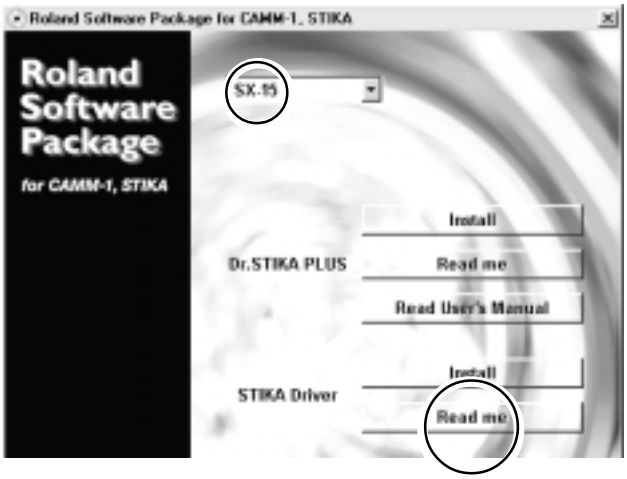
9 Viewing the PDF manual for Dr. STIKA PLUS.
The CD-ROM included with the SX-15/12/8 contains the "Dr. STIKA PLUS User's Manual" as a PDF file.
For [Dr. STIKA PLUS], click [Read the User's Manual].
Acrobat Reader is required to view the PDF file. If Acrobat Reader is not already installed and set up on your computer, the installation program starts automatically. Follow the on-screen instructions.



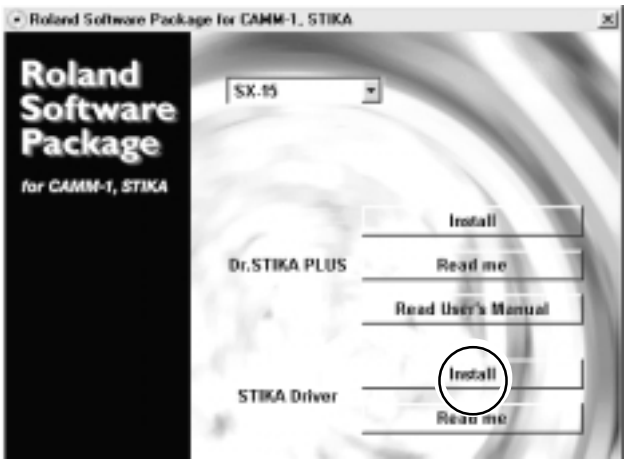
* A printed version of the PDF manual for Dr. STIKA PLUS is not included.
You can view it using Acrobat Reader, and use the printing menu to output it to your printer as required.

Next, install the driver.
This is required when sending data from a Windows-based program to the SX-15/12/8. Be sure to install it.

10 Make sure the model you're using is selected.
Before installing and setting up, click [Read me] for each piece of software and read the information displayed.

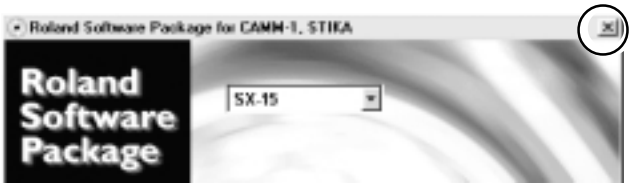


11 For [STIKA Driver], click [Install].
Installation of the driver starts.



12 The driver settings appear.
Check the values, click [Close], and finish installing the driver.

13 At the Setup screen, click ✕ to close the window.
Remove the CD-ROM from the CD-ROM drive.

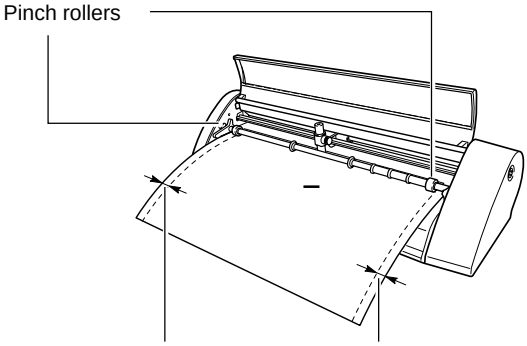


*If the SX-15/12/8 does not operate when you send data from the program, take a look at "4.2 What to do if....".

Part 2 Performing Cutting

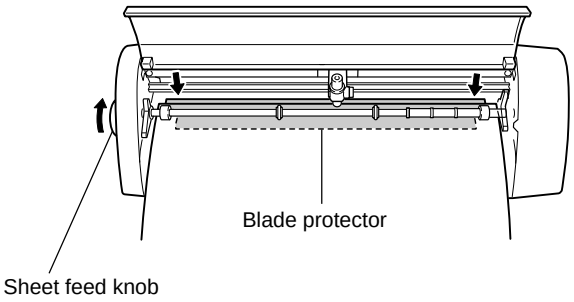
2.1 Load the Material

1 Place the material against the pinch rollers.
Load the material as shown in the figure, so that it does not come loose during cutting.



Make sure the two sides of the material are even.

2 Turn the sheet feed knob to align the forward edge of the material with the back of the blade protector.

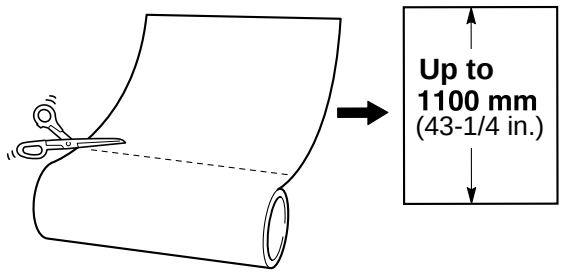


Do not use any of the following materials. The material may come loose during cutting or otherwise fail to be fed properly.

Materials which has curled upward	Material with a front edge that is not straight	Material with left and right edges that are not parallel	Material that is longer than 1110 mm (43-1/4 in.)

Using Roll Material

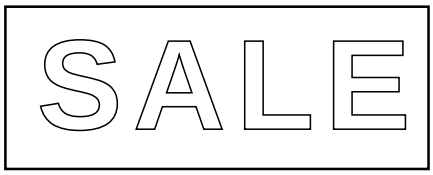
Material cannot be loaded on the SX-15/12/8 while still attached to the roll.
Cut off from the roll a length of material equal to the require length for cutting plus a margin of 30 mm.
The SX-15/12/8 can be loaded with material up to 1100 mm (43-1/4 in.) in length. However, the cutting area is only up to 1,000 mm (39-5/16 in.).



- Cut off the material at a right angle.If the end of the roll material is not straight, then the next time cutting is per formed material feed may not be performed correctly, and the material may move at an angle and come loose.
- Depending on the composition of the material, it may not be possible to cut some fluorescent or reflective material, even if the material is of a cuttable thickness.

2.2 Creating Cutting Data

This section explains the basic operation of Dr. STIKA PLUS while making the sticker shown below. For information on editing and operation to match the task at hand, please refer to "3 Mastering the SX" or the help for Dr. STIKA PLUS and the driver.



Starting the Software

1 Click [Start], and point to [Program].
Then point to [Roland Dr. STIKA PLUS] and click [Dr. STIKA PLUS].

2 The opening screen appears and Dr. STIKA PLUS starts.

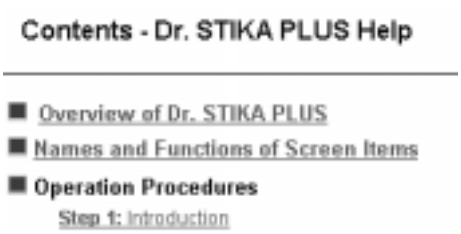
Using Help

When creating data, if you're unsure about how to proceed, follow the steps below to view the help screens.
Also, when carrying out an operation for the first time, you can display help on your computer to guide you as you proceed.

Displaying help screens

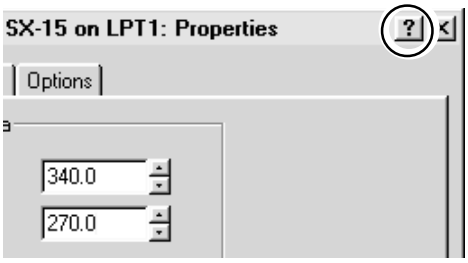
1 From the [Help] menu, click [Contents].

2 Click the mouse on text (or figures) in green to display an explanation or related information.

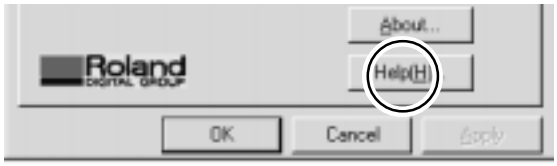

Contents - Dr. STIKA PLUS Help
Overview of Dr. STIKA PLUS
Names and Functions of Screen Items
Operation Procedures
Step 1: Introduction

Using the [?] button and [Help] button

If the window you're in has a [?] button in the upper right-hand corner, you can use this button to display context-sensitive help. Click [?], then click the item you wish to know more about.



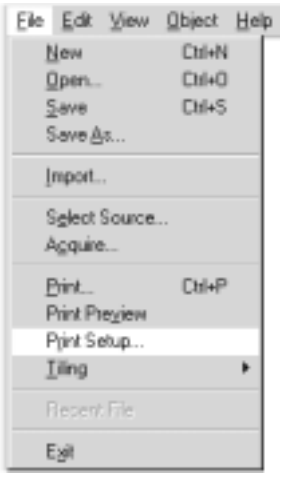
If there is a [Help] button in a window, you can use this button to display help about the window.



Setting the Cutting Range and Tool Conditions

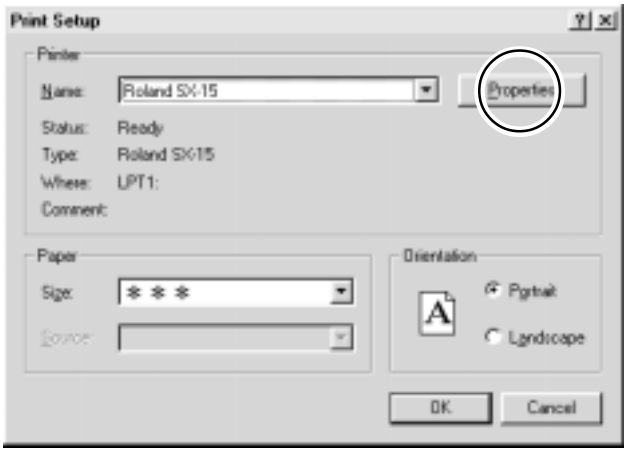
If You're Using Windows 95/98/Me

1 From the [File] menu, click [Print Setup].
The [Print Setup] dialog box appears.



2 For the SX-15, select [Roland SX-15]. For the SX-12, select [Roland SX-12]. For the SX-8, select [Roland SX-8]. Then click [Properties].
The [Properties] dialog box appears.

* The screen at right is shown when [Roland SX-15] has been selected.

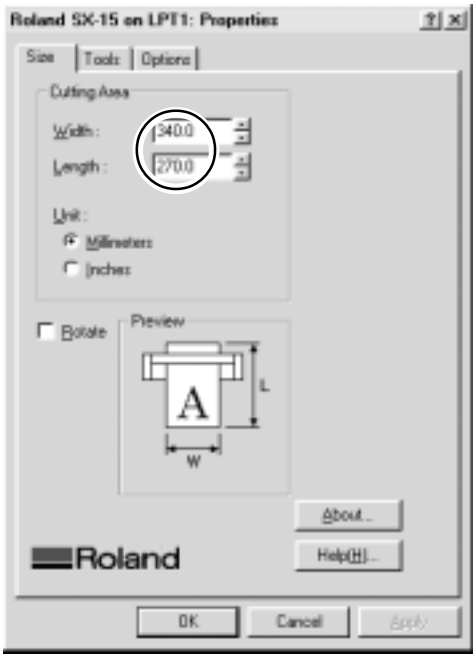


3 Set the cutting range.
If you are using the included material, make sure the cutting range is set to the following values.

SX-15 : 340 mm (13.38 in.) (width)
270 mm (10.63 in.) (length)
SX-12 : 250 mm (9.84 in.) (width)
390 mm (15.35 in.) (length)
SX-8 : 160 mm (6.29 in.) (width)
270 mm (10.63 in.) (length)

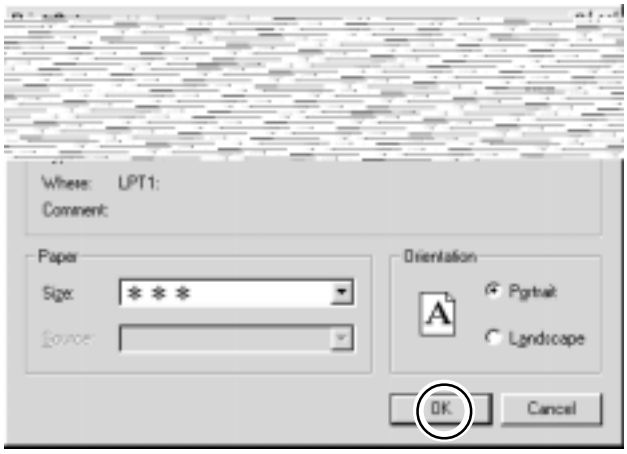
* If you're using SX-12/8, width is a fixed value.

● In [Cutting Area], for [Length], enter a value larger than the length of the data to cut.



Continued on the next page

4 Click [OK].



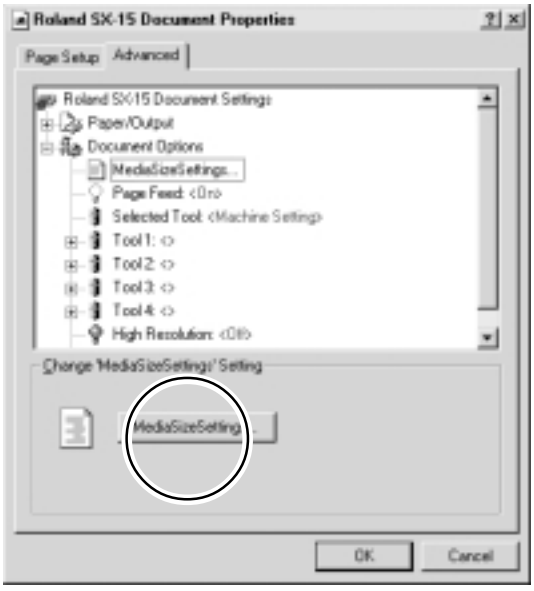
If You're Using Windows NT 4.0

*To change the settings for the various items, log on to Windows as "Administrator" or as a member of the "Power Users" group. For more information about groups, refer to the documentation for Windows.

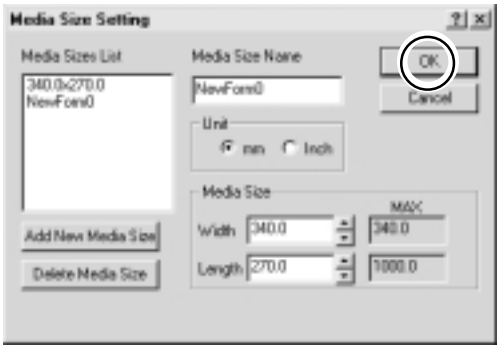
1 From the [File] menu, click [Print Setup].
The [Print Setup] dialog box appears.

2 For the SX-15, select [Roland SX-15]. For the SX-12, select [Roland SX-12]. For the SX-8, select [Roland SX-8]. Then click [Properties].
The [Properties] dialog box appears.

3 Under [Document Options], choose [MediaSizeSettings].
Click the [MediaSizeSettings] button.
The [MediaSizeSettings] dialog box appears.



4 Set the cutting range.
If you are using the included material, make sure the cutting range is set to the following values.
SX-15 : 340 mm (13.38 in.) (width)
270 mm (10.63 in.) (length)
SX-12 : 250 mm (9.84 in.) (width)
390 mm (15.35 in.) (length)
SX-8 : 160 mm (6.29 in.) (width)
270 mm (10.63 in.) (length)
* If you're using SX-12/8, width is a fixed value.
Click [OK].
The [Properties] dialog box appears.
- If you want to change the size, click [Add New Media Size], and at [Media Size], enter the value for [Length].
- In [Cutting Area], for [Length], enter a value larger than the length of the data to cut.



* This is the screen that appears when you click [Add New Media Size].

5 Click [OK].

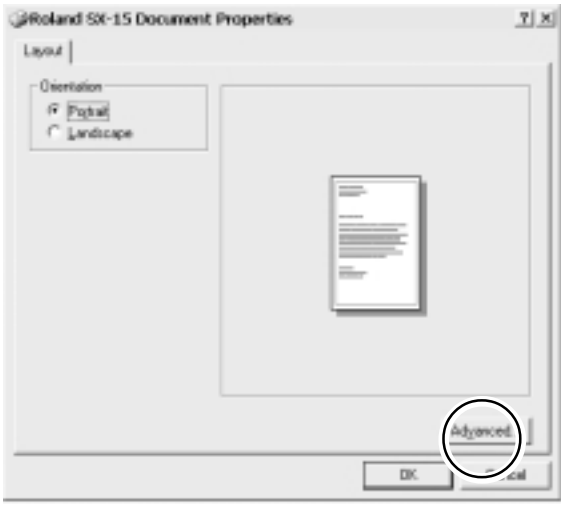
If You're Using Windows 2000

*To change the settings for the various items, log on to Windows as "Administrator" or as a member of the "Power Users" group. For more information about groups, refer to the documentation for Windows.

1 From the [File] menu, click [Print Setup].
The [Print Setup] dialog box appears.

2 For the SX-15, select [Roland SX-15]. For the SX-12, select [Roland SX-12]. For the SX-8, select [Roland SX-8]. Then click [Properties].
The [Properties] dialog box appears.

3 Click [Advanced].
The [Advanced Options] dialog box appears.



Continued on the next page

4 Choose [MediaSizeSettings], then click [Properties].
The [MediaSizeSetting] dialog box appears.

5 Set the cutting range.
If you are using the included material, make sure the cutting range is set to the following values.

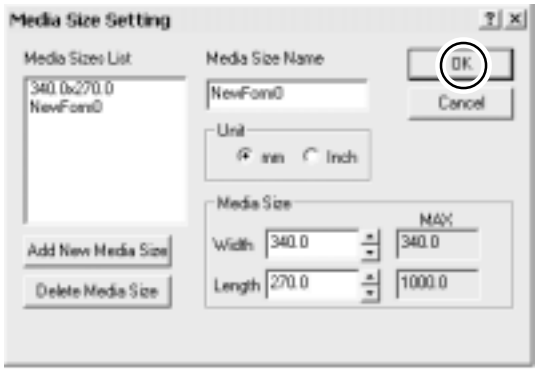
SX-15 : 340 mm (13.38 in.) (width)
270 mm (10.63 in.) (length)
SX-12 : 250 mm (9.84 in.) (width)
390 mm (15.35 in.) (length)
SX-8 : 160 mm (6.29 in.) (width)
270 mm (10.63 in.) (length)

* If you're using SX-12/8, width is a fixed value.

Click [OK].

The [Advanced Options] dialog box appears.

- If you want to change the size, click [Add New Media Size], and at [Media Size], enter the value for [Length].
- In [Cutting Area], for [Length], enter a value larger than the length of the data to cut.
- To select an added media size, then after you add the size, again display [Print Setup], go to [Media Size List], and select the saved size. Simply adding a media size does not make the driver select it.



6 Click [OK].
The [Properties] dialog box appears.
Click [OK].

7 The [Print Setup] dialog box appears.
Click [OK].

Manipulating Text and Shapes

Entering and Saving Text

The fonts that Dr. STIKA PLUS can use are limited to the TrueType fonts available for Windows. When selecting a font, non-TrueType fonts are not displayed. Refer to the help screens for more information about using fonts.

1 The white area of the screen is the cutting range. Any portions that protrude beyond this area are not cut. Use the zoom out function for Dr. STIKA PLUS to display the entire cutting area on screen.

- To zoom in or out, click , then click on the desired area of the screen.

Left click:	Zoom in
Right click:	Zoom out

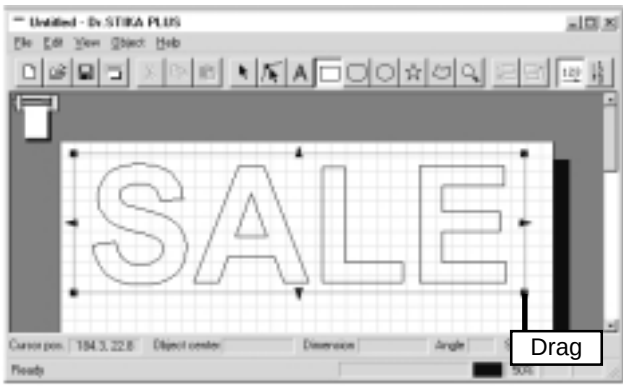
- For more information about the cutting range, see "3.3 Cutting Range."

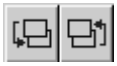
2 Click .

Click at the desired location, then enter "SALE" using the keyboard.

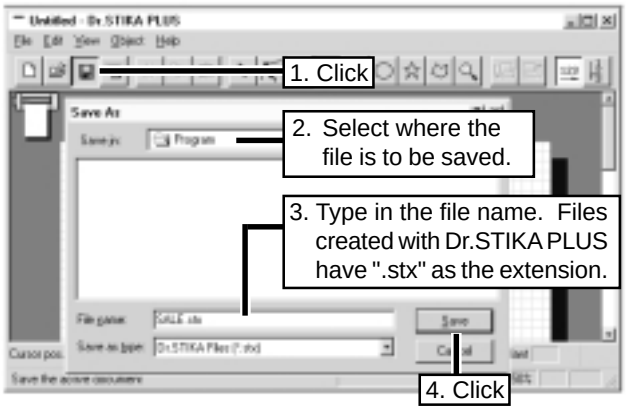
Continued on the next page

3 Click . This encloses the "SALE" text in a rectangle so that only the area of the sheet around what is cut is peeled off.



-When you are cutting small text, you can make peeling easier by enclosing each single character in a square.
-All object overlapping is contextual, with the most recently created objects arranged on top. You can change the context of objects by using the  buttons. For detailed information, see the help screens or PDF manual for Dr.STIKA PLUS.

4 Click and save the data you've made to a file.


1. Click
2. Select where the file is to be saved.
3. Type in the file name. Files created with Dr.STIKA PLUS have ".stx" as the extension.
4. Click

-The cutting range you set with Dr. STIKA PLUS is not saved. When you reimport saved data, check the cutting range.
-To change the default font for Dr. STIKA PLUS, start Dr. STIKA PLUS, and before you type in text, go to the [Object] menu and use [Font Select] to select the font you want to make the default.
The changed font is applied only to text that you type in or select in Dr. STIKA PLUS.

Changing the Size

Click .

Drag a text box with the mouse to change its size. Change the size to fit inside the white portion of the display.

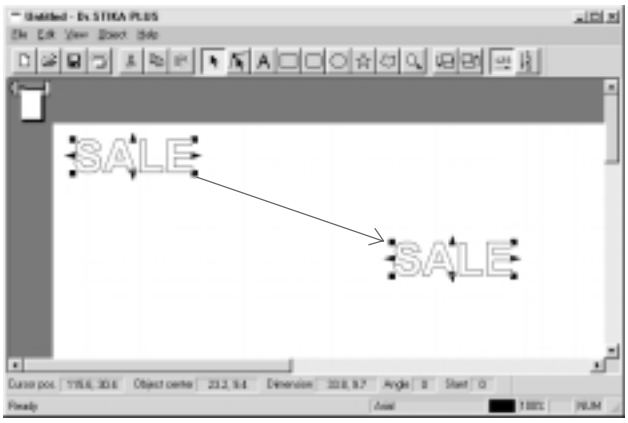
You can freely enlarge or reduce the size by dragging up or down or to the left or right.

This lets you confirm the size of the text box.

Moving Text and Shapes

Click then click the text.

Move the text by dragging it up, down, or to the left or right.

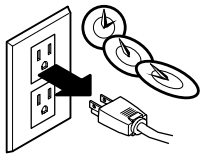


When the [View] menu command [Snap To Grid] is selected, text strings automatically snap to the grid. When you want to move a text string to a location off the grid, clear the selection for [Snap To Grid].

2.3 Starting Cutting

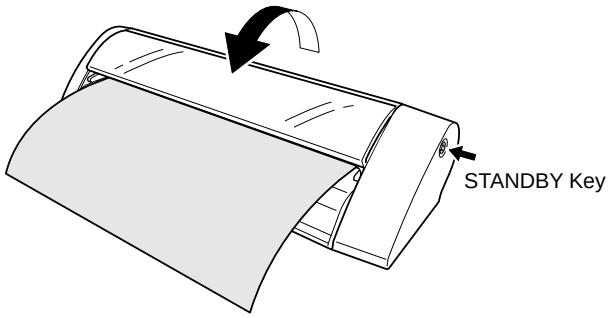
⚠CAUTION

When not in use for several hours, unplug the power-cord plug from the electrical outlet.
Failure to do so may result in danger of electrical shock, electrocution, or fire due to deterioration of electrical insulation.

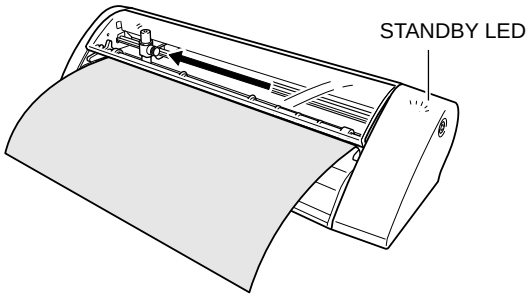


Before performing cutting, make sure the SX-15/12/8 has been prepared as described in the sections "2.1 Load the Material" to "2.2 Creating Cutting Data"

1 Close the front cover and press the [STANDBY] key.



2 The [STANDBY] LED lights up and the carriage moves as shown in the figure, then stops.



3 Click , then click [OK] in the dialog box that appears.
Data is sent to the SX-15/12/8 and cutting starts.

4 Rotate the material feed knob and remove the sheet.

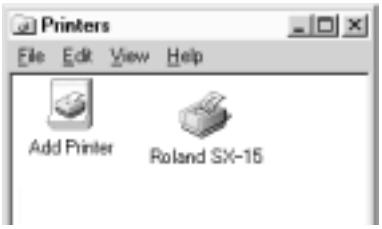
5 Press the [STANDBY] key to switch off the power.
Make sure the [STANDBY] LED is not lit up.

If You Want to Stop Cutting Before It's Finished...

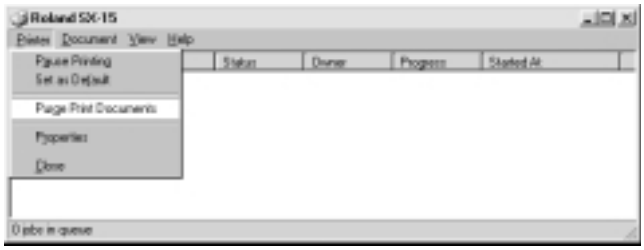
1 Press the [STANDBY] key to switch off the power.

2 Click [Start]. Click [Settings], then click [Printers].

3 For the SX-15, double-click the [Roland SX-15] icon. For the SX-12, double-click the [Roland SX-12] icon.For the SX-8, double-click the [Roland SX-8] icon.



4 At the [Printers] menu, click [Purge Print Ducuments] or [Cancel].
(If you're using Windows 2000, click [Cancel All Documents].)
Make sure the displayed data for the file being printed disappears.



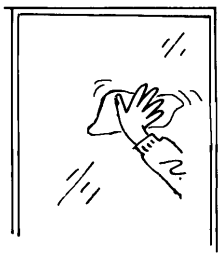
2.4 Applying Cut Material

When storing material that has been cut, be sure to cover it with application tape. This protects the material against dust.
You can prevent the entry of dust inside the material by leaving an edge on the cut material at this time.

1 Peel off excess portions of the sheet.
You can peel detailed areas easily using commercially available pointed tweezers or the like.

2 Cover evenly with application tape so that no air bubbles are trapped between the tape and the material, then transfer the material to the tape.
You can transfer the material easily by using a commercially available squeegee or the flat part of a ruler or the like to rub the cut material from above the application tape.

3 Wipe away any dust or oil from the location where the material is to be applied.



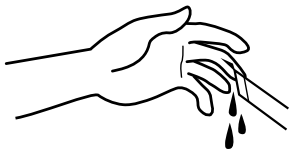
4 When transferring the material to the object, air may get between the material and the transfer surface, forming air bubbles. If this happens, use a needle to puncture the bubbles, then press out the trapped air and affix the material to the transfer surface.
Place the entire piece of application tape against the object, then press down evenly on the tape, working from top to bottom. While constantly making sure the material has been transferred to the object, slowly peel away the application tape.

Part 3 Mastering the SX

3.1 Adjusting and Replacing the Blade

⚠CAUTION

Do not touch the tip of the blade with your fingers.
Doing so may result in injury.

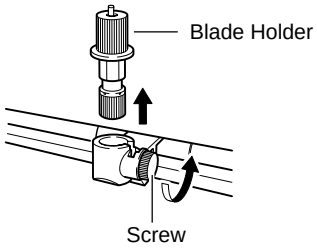


NOTICE When mounting the blade holder, take care not to overtighten the blade retaining screw. The cutter mounting screw may be broken.

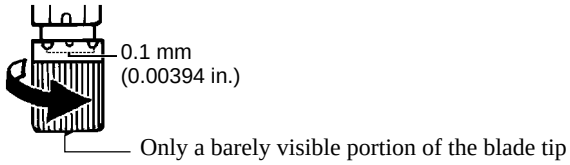
Adjusting the Amount of Blade Extension

The optimal amount of blade extension is the same value as the thickness of the material (not including backing paper).
Material of the following composition and thickness can be cut.
- Composition Vinyl chloride sheets
- Thickness Sheet portion :0.1 mm (0.00394 in.) or less, including base paper of 0.3 mm (0.0118 in.) or less

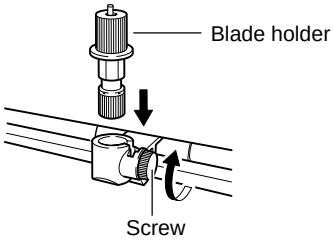
1 Switch off the power to the SX-15/12/8.
Loosen the screw and pull out the blade holder.



2 Rotate the tip of the blade holder in the direction shown in the figure to extend the blade. Turning the tip by an amount corresponding to one large scale gradation extends the blade by 0.1 mm (0.00394 in.).
The amount of blade extension when shipped from the factory is 0.1 mm (0.00394 in.).



3 Insert the blade holder and tighten the screw.



Verifying the Amount of Blade Extension

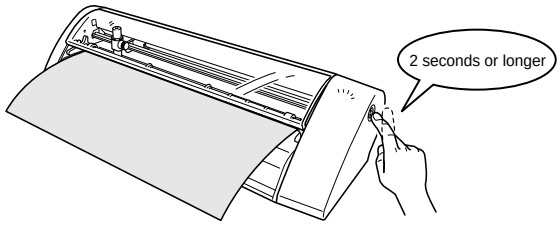
NOTICE Be sure to load material before you carry out a cutting test. Failure to do so may damage the blade and blade protector.

Do not move the carriage by hand. Doing so may result in breakdown.

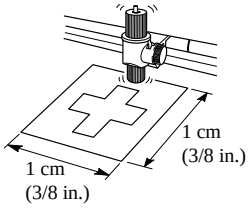
Do not attempt to move the carriage by hand. Doing so may lead to faulty operation.

Perform a cutting test to check the results of adjusting the amount of blade extension.
With test cutting, the SX-15/12/8 actually cuts the material, allowing you to determine how well cutting is performed.
Test cutting is performed when changing the type of material.

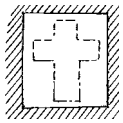
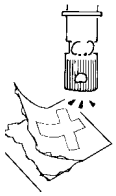
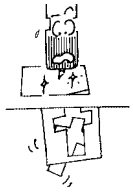
1 Load material.
Make sure the [STANDBY] LED is lit and hold down the [STANDBY] key for 2 seconds or longer. When the carriage begins to move, release the key.



The cutting test starts at the present location of the blade.
To perform continuous cutting tests, after the previous cutting finishes, again hold down the [STANDBY] key for 2 seconds or longer. This cutting test is performed at a location that does not overlap with the place cut previously.



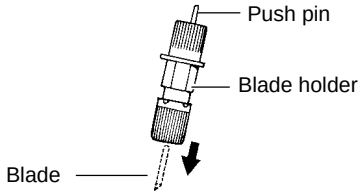
2 Check the cut quality of the material.
The cutting quality is affected by the amount of blade extension. Try peeling the cut sheet, and use the blade holder to adjust the amount of blade extension accordingly.

-The blade leaves faint traces on the backing paper when cutting the cross.	-The sticker cannot easily be peeled off of the backing paper. -Cut areas are not continuous. -Cutting results are misaligned.	-The blade cuts into the backing paper. -The backing paper is cut through. -The material peels during cutting.
		
Optimal amount of blade extension	**Amount of blade extension is too short**	**Amount of blade extension is too long**

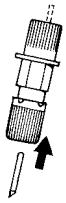
Changing the Blade

If the material is still not cut attractively even after adjusting the blade extension and performing test cutting several times, the blade tip may be broken. Replace it with a new blade.

1 Press the push-pin and remove the old blade.



2 Insert the new blade firmly until it clicks into place.

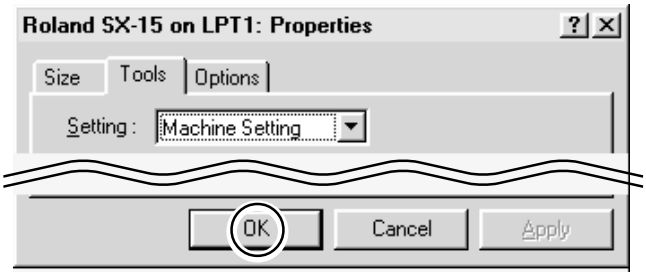


3.2 Setting the Tool Conditions

If You're Using Windows 95/98/Me

1 Start Dr. STIKA PLUS and display the [Properties] dialog box.
For information on how to display the [Properties] dialog box, refer to "2.2 Setting the Cutting Range."

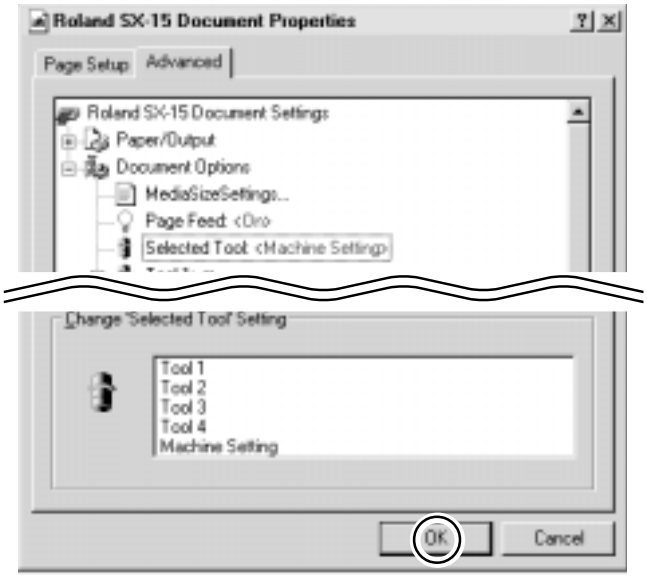
2 Click the [Tools] tab.
The [Tools] tab appears.
When using the included blade and material, there is no need to change the tool conditions. Make sure [Machine Setting] is displayed and click [OK].
The [Print Setup] dialog box appears.
Click [OK].



If You're Using Windows NT 4.0

1 Start Dr. STIKA PLUS and display the [Properties] dialog box.
For information on how to display the [Properties] dialog box, refer to "2.2 Setting the Cutting Range."

2 When using the included blade and material, there is no need to change the tool conditions. Click [Selected Tool], and make sure it is set to [Machine Setting].
The [Print Setup] dialog box appears.
Click [OK].



If You're Using Windows 2000

1 Start Dr. STIKA PLUS and display the [Properties] dialog box.
For information on how to display the [Properties] dialog box, refer to "2.2 Setting the Cutting Range."

2 When using the included blade and material, there is no need to change the tool conditions. Click [Selected Tool], and make sure it is set to [Machine Setting].
Click [OK].
The [Properties] dialog box appears.
Click [OK].
The [Print Setup] dialog box appears.
Click [OK].

To Change the Tool Conditions

To change the tool conditions and use something other than the included material, go to [Settings] and change [Machine Settings] to [1] or [2], [Tool 1], [Tool 2], and so on.
Enter the required values for [Speed], [Offset], and [Compensate].
For details about these items, refer to the help screens for the driver.

* The screen shown is for Windows 95/98/Me. The screens for Windows NT 4.0/2000 are different.

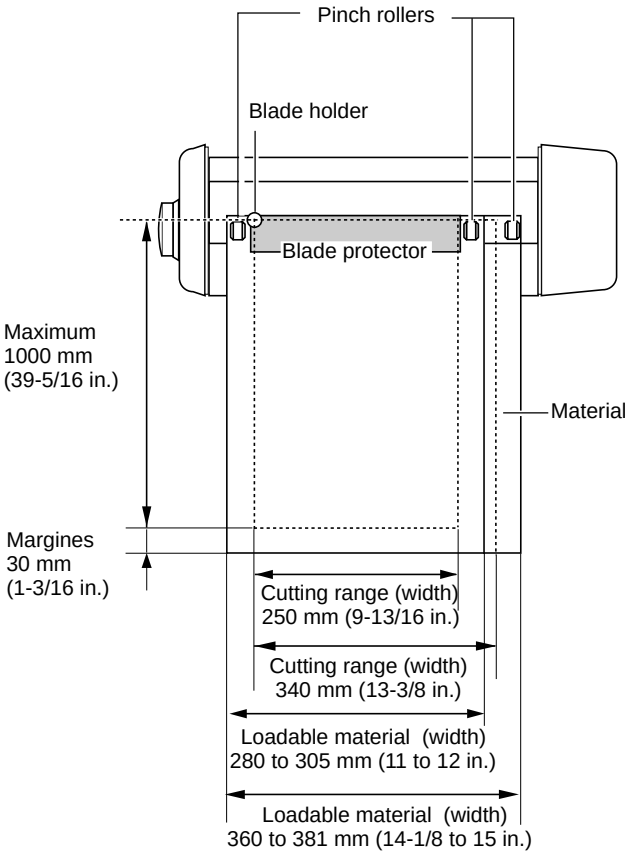
3.3 Cutting Range

	Cutting range (width)	Cutting range (length)	Loadable material (width)	Loadable material (length)
SX-15	340 mm (13-3/8 in.)	1000 mm (39-5/16 in.)	360 to 381 mm (14-1/8 to 15 in.)	1100 mm (43-1/4 in.)
	250 mm (9-13/16 in.)	1000 mm (39-5/16 in.)	280 to 305 mm (11 to 12 in.)	1100 mm (43-1/4 in.)
SX-12	250 mm (9-13/16 in.)	1000 mm (39-5/16 in.)	280 to 305 mm (11 to 12 in.)	1100 mm (43-1/4 in.)
SX-8	160 mm (6-1/4 in.)	1000 mm (39-5/16 in.)	200 to 215 mm (7-13/16 to 8-7/16 in.)	1100 mm (43-1/4 in.)

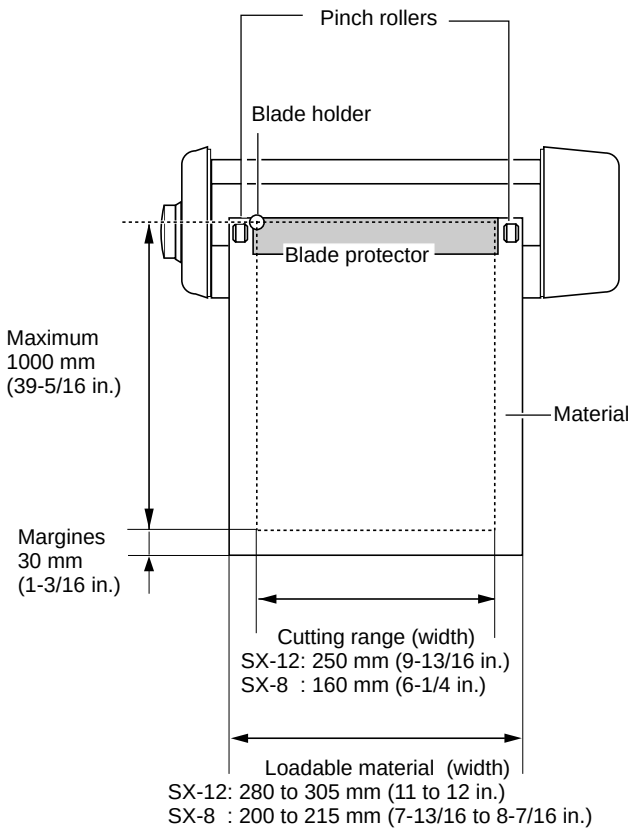
- The sheet behind the cutter holder cannot be cut.
- The front and the left and right side of the material are necessary margins to allow feed of the material by the pinch rollers.

The cutting range is inside the dotted box.

If You're Using the SX-15



If You're Using the SX-12/8

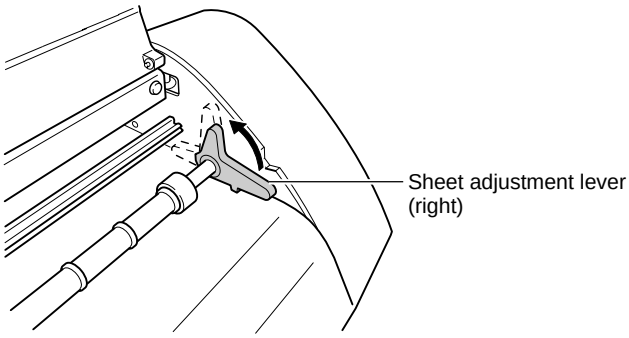


3.4 Changing the Loaded Material Width on the SX-15

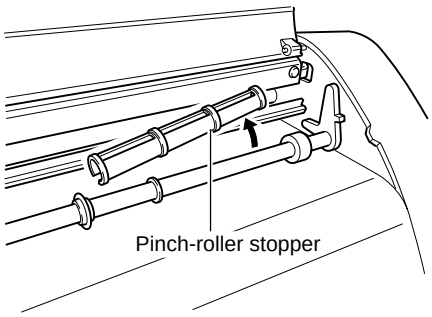
The SX-15 can also use material of a width for the SX-12 (280 to 305 mm (11 to 12 in.)) To change the loadable material width from 360 to 381 mm (14-1/8 to 15 n.) to 280 to 305 mm (11 to 12 in.), move the pinch-roller stoppers and change the driver setting for the cutting range.

Change the Loadable Material Width to 280 to 305 mm (11 to 12 in.)

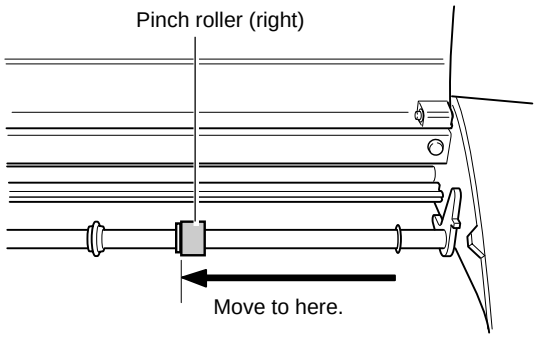
1 Raise the sheet adjustment lever on the right side.



2 Detach the pinch-roller stopper from the machine.

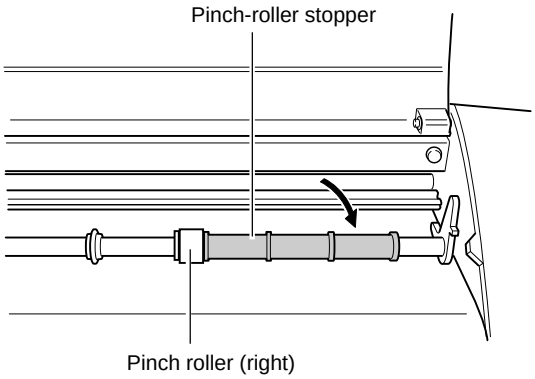


3 Move the right pinch roller in the direction of the arrow.

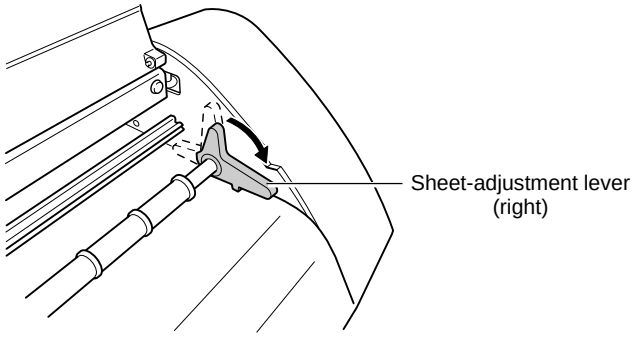


Continued on the next page

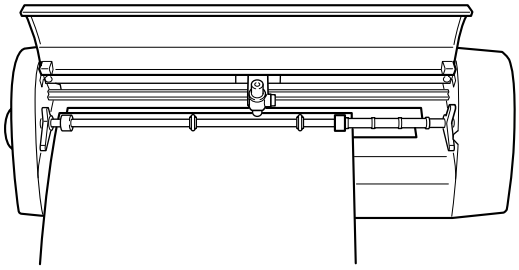
4 Attach the pinch-roller stopper to the right of the pinch roller.



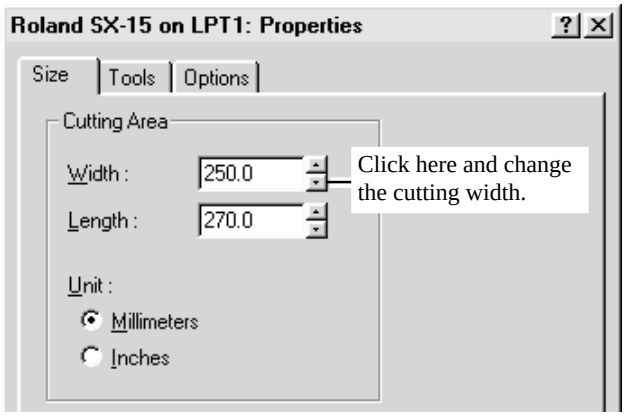
5 Lower the right sheet adjustment lever.



6 Load material of a width for the SX-12 (280 to 305 mm (11 to 12 in.)).



7 Change the cutting-width setting for the SX-15 driver from 340 mm to 250 (13.38 to 9.84 in.) mm.
For information about how to change the cutting width, see "2.2 Setting the Cutting Range and Tool Conditions."



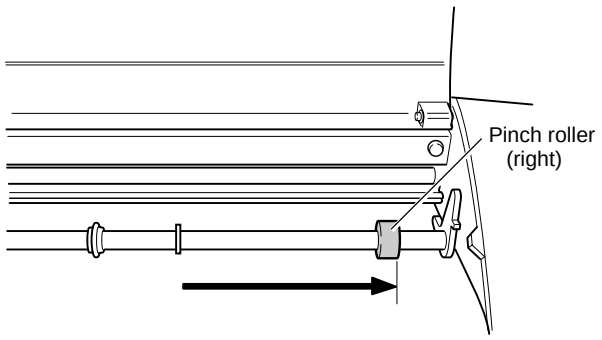
* The screen shown is for Windows 95/98/Me.
The screens for Windows NT 4.0/2000 are different.

Returning the Loadable Material Width to 360 to 381 mm (14-1/8 to 15 in.)

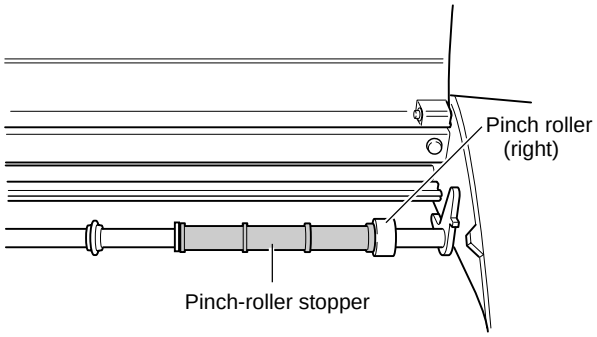
1 Raise the sheet adjustment lever on the right side.

2 Detach the pinch-roller stopper from the machine.

3 Move the right pinch roller in the direction of the arrow.



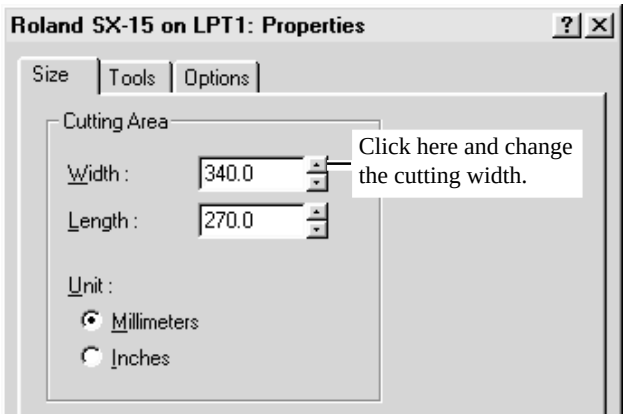
4 Attach the pinch-roller stopper to the left of the pinch roller.



5 Lower the right sheet adjustment lever.

6 Load material of a width for the SX-15 (280 to 305 mm (11 to 12 in.)).

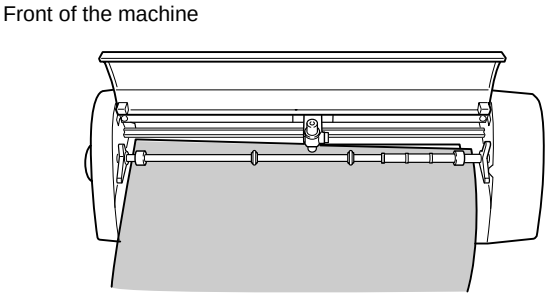
7 Change the cutting-width setting for the SX-15 driver from 250 mm to 340 mm (9.84 to 13.38 in.).
For information about how to change the cutting width, see "2.2 Setting the Cutting Range and Tool Conditions."



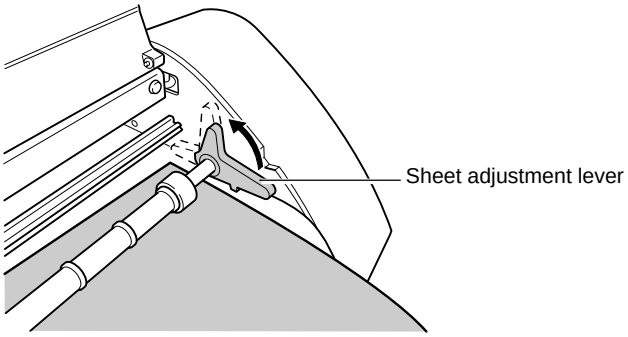
* The screen shown is for Windows 95/98/Me.
The screens for Windows NT 4.0/2000 are different.

3.5 Correcting the Slant of Loaded Material

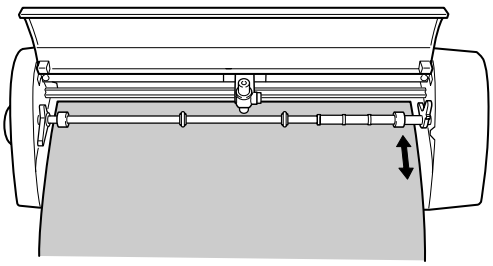
If material is not loaded parallel with respect to the machine, the material may come loose during cutting.
If you're using the SX-15/12, you can use the sheet adjustment lever to correct the slant of material without removing the material from the machine.



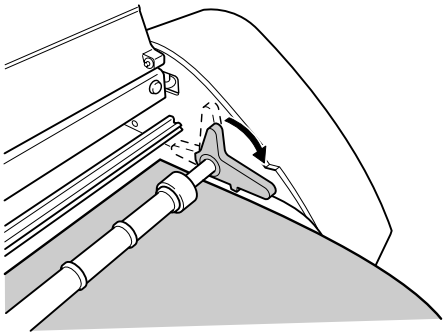
1 Raise the sheet adjustment lever.



2 Move the material to the front and back and position it so that it is straight with respect to the machine.



3 Lower the sheet adjustment lever to secure the material in place.



3.6 Importing Windows Bitmap Format

You can import files and created data in Windows bitmap format (having the file extension *.bmp) into Dr. STIKA PLUS, perform outlining for the data, and cut the data on the SX-15/12/8.
Depending on the image that is imported, some shapes that result may not be suitable for cutting. Keep the following conditions in mind as you create the data, then import it in Dr. STIKA PLUS. Refer to the documentation for the software you're using for information on how to save files in Windows Bitmap format (with the file extension *.bmp).

Conditions for Data That Yields Attractive Cutting Results

-Boundaries between two colors should be sharp and well defined, with no continuous gradations.
In general, photographs and scanning data contain continuous gradations and are not suitable for cutting.

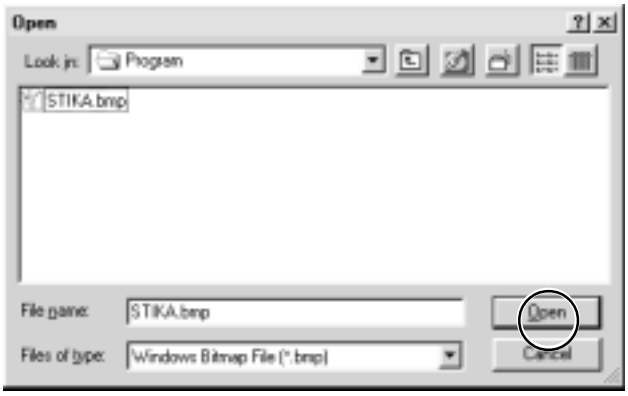
-The resolution should be high.
As a general guide, the original dimensions should be 200 dpi or higher.
It may take a long time to import high-resolution data into Dr. STIKA PLUS.

-The original image that you import should be the same size as or larger than the image to cut. .
When you import into Dr. STIKA PLUS an original image that is smaller than the size you want to cut, you cannot attractive cutting results even by enlarging the image to the size you want. To obtain attractive cutting results, import an original image that is larger than the cutting size, then reduce the image to the size you want.

For detailed information, see the PDF manual or help screens for Dr. STIKA PLUS.

Importing an Image

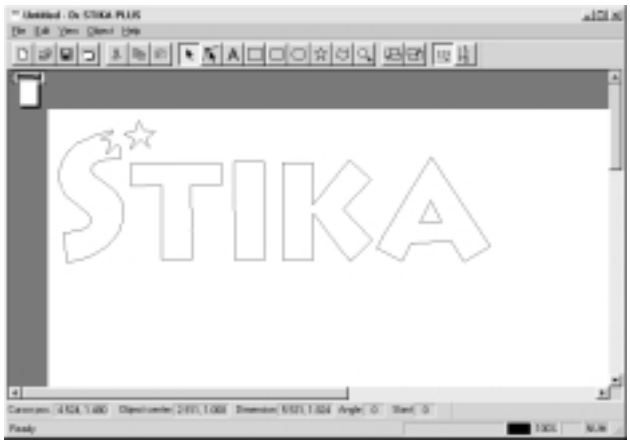
1 At the [File] menu, click [Import] to display the screen shown at right.
Click [File Type], then click [Windows Bitmap File (*.bmp)]. Select the file to use, then click [Open].



2 The image appears in the [Preview] dialog box. Click [OK].
To extract attractive outlines, refer to the preceding "Conditions for data that yields attractive cutting results" and create the data.

Continued on the next page

3 The data in the selected file is imported.
Adjust the size and positioning.

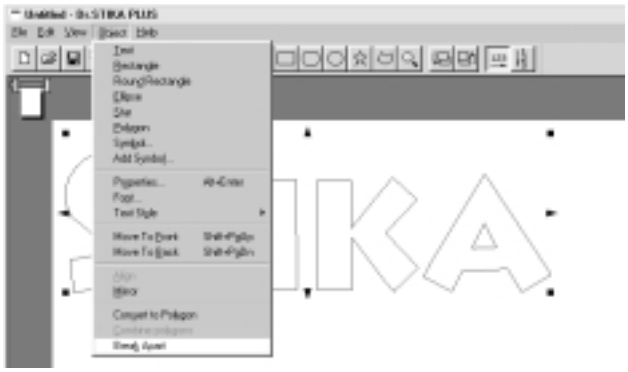


The size of the imported original image and the size of the data imported into Dr. STIKA PLUS are different.
Refer to "2.2 Creating Cutting Data" and return the size of the object to the size you want.

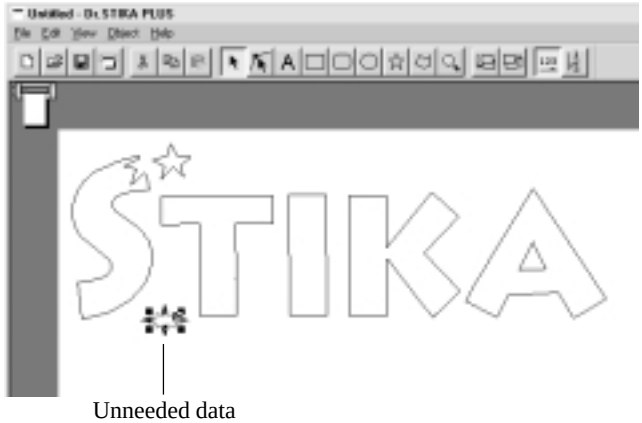
To Delete Unneeded Data

When an imported object includes unneeded data, you can delete the unnecessary data using Dr. STIKA PLUS.

1 Select the imported object.
At the [Object] menu, click [Break Apart].
The imported object is divided.



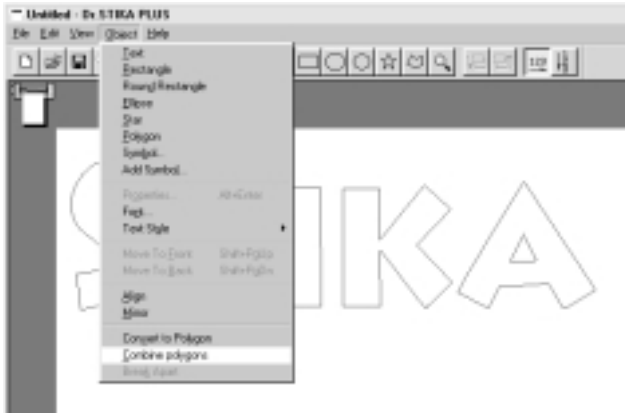
2 Click the unneeded data.



Unneeded data

3 From the [Edit] menu, click [Delete].
The unneeded data is deleted.

4 Restore the divided object to its original state.
Use the mouse to drag and select all the objects you want to combine.
At the [Object] menu, click [Combine Polygons].
To select all data in the Dr. STIKA PLUS window, go to the [Edit] menu and click [Select All].
You can also select only the objects you want by holding down the SHIFT key and selecting the objects.

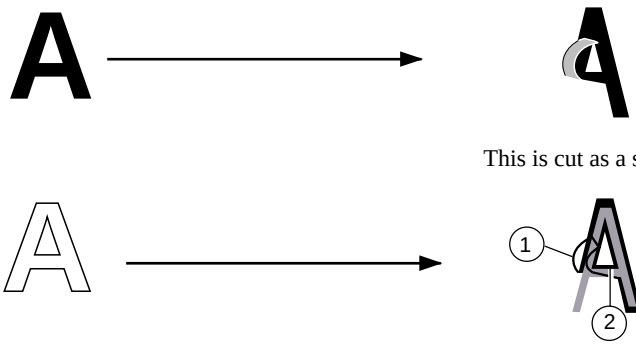


Using a Scanner to Import an Object

You can import image data using a scanner.
An image acquired with a scanner can be imported into Dr. STIKA PLUS and outlined for cutting with the SX-15/12/8.
For detailed information, see the PDF manual or help screens for Dr. STIKA PLUS.
Dr. STIKA PLUS supports scanners that comply with TWAIN32. For information on connecting the scanner and installing the scanner driver, please refer to the scanner's documentation.

When you are scanning and cutting data such as bold logos, fill the original image before you scan it. Dr. STIKA PLUS extracts the contours and performs outlining of objects. The portions that the SX-15/12/8 cuts may vary depending on the original imported image.

Original image data



This is cut as a single object.

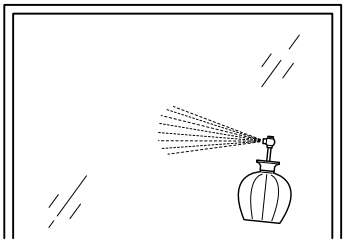
Two lines, one on the inner side and the other on the outer side, are cut.

3.7 Applying Large Material

The larger the material is, the more difficult is it to apply while adjusting misalignment of the entire material, and the greater is the likelihood that air bubbles will get trapped between the material and the application surface.
Applying detergent-containing water to the application surface makes it difficult for air bubbles to form and lets you move the position of the material as you affix it.

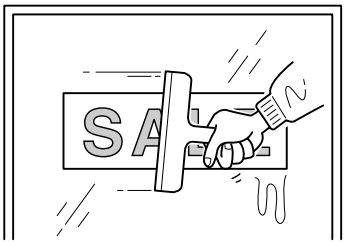
1 Prepare the cut material.
Affix application tape to the top of the material.

2 Wipe away any dust or oil from the location where the material is to be applied.
Use a commercially available mister to spray a generous amount of water containing two or three drops of neutral detergent to the application surface.



3 Place the material on the application surface.
Adjust the positioning and angle of the material.

4 Use a commercially available squeegee or a ruler to remove moisture.



5 After you have removed all moisture, slowly peel off the application tape.

Part 4 User's Reference

4.1 Care and Maintenance

⚠CAUTION

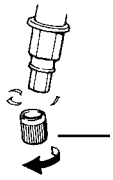
When using a commercially available cutter knife for replacing the blade protector, do not place the hands anywhere along the path in the direction of blade movement.
Doing so may result in injury.

Cleaning the Blade Tip

Material scraps or adhesive adhering to the blade tip can adversely affect cutting.
Remove any buildup of material scraps or adhesive from the blade tip.

Cleaning the Blade Holder

Material scraps or grime that get inside the blade holder can adversely affect cutting.
Take off the tip of the blade holder and remove any pieces of material inside.



Rotate the tip of the blade holder in the direction shown in the figure to remove it.

Cleaning the Machine

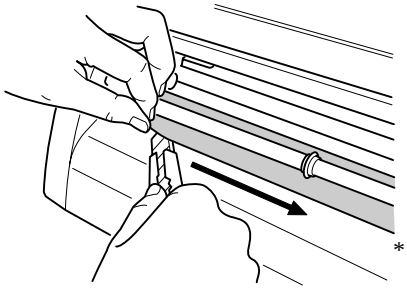
If the machine becomes soiled, wipe it clean with a dry cloth.

Replacing the Blade Protector

Slight scratching of the blade protector poses no problem for operation. However, the blade protector should be replaced if it becomes so severely damaged that cutting is adversely affected.
Consult your vendor or your nearest Roland DG Corp. sales office for replacement of the blade protector. (Replacement of the blade protector is a charged procedure.)

1 Switch off the power to the SX-15/12/8.

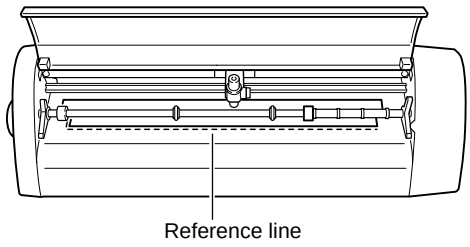
2 Peel off the blade protector from the machine.
Using a commercially available cutter knife or the like may make peeling easier.
Remove the blade protector.
If you're using the SX-15, raise the left and right sheet adjustment levers and remove the blade protector.



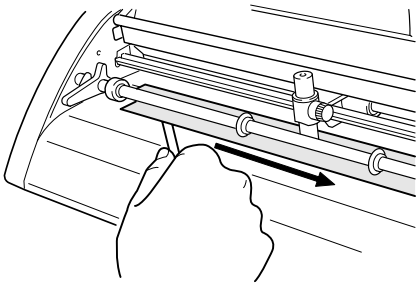
* Do not place the hands anywhere along the path in the direction of blade movement.

3 Use a cloth or the like to wipe away any remaining adhesive on the machine.

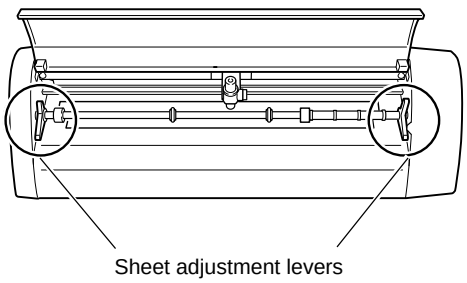
4 Place the replacement blade protector on the SX-15/12/8.
Use the reference line shown on the SX-15/12/8 as a guide for alignment.



5 Peel off the double-sided tape and attach the included replacement blade protector.



6 If you're using the SX-15, lower the left and right sheet adjustment levers.



4.2 What to do if...

The SX-15/12/8 doesn't operate.

Is the STANDBY key on (with the STANDBY LED lit up)?

The power is off. Press the STANDBY key.

Is the cable connected?

Switch off the power to the computer and the SX-15/12/8, and use a parallel cable (IEEE 1284-compliant) to connect the two devices.

For information on how to make the connections, see "1.3 Connecting the Cables."

Is the correct type of cable used?

The type of parallel cable (IEEE 1284-compliant) may vary according to the computer model. Make the connection with the correct type of cable for the computer.

Be sure the computer and the SX-15/12/8 are both switched off before attempting to attach or disconnect the printer cable (IEEE 1284-compliant).

Is the STANDBY LED not flashing?

A communication error or command error has occurred.

Switch off the power and check the cable connections and port settings for the drivers.

Are the settings for the driver correct?

If the port setting is different from the port connected to the SX-15/12/8, make the setting for the connect port.

Is the printer port for Windows set to [ECP Printer Port]?

If the computer and the SX-15/12/8 are connected by a parallel cable and there is no operation, check the printer port for Windows. If it is set to [ECP Printer Port], change it to [Printer Port]. For information on how to change the setting, contact the manufacturer of your computer.

The SX-15/12/8 stops while cutting is in progress (and no error message appears on the computer screen).

Is the computer in energy-saving mode?

If the computer is in energy-saving mode, follow the steps below to turn off power management in Windows.

For information on how to change the setting, contact the manufacturer of your computer.

Pressing the STANDBY key does not switch off the power.

Unplug the AC adapter from the unit.

The Dr. STIKA PLUS doesn't function.

Does the computer you're using provide the correct operating environment for the included software?

Check "1.3 Operating Environment for Software" and make sure you're using a computer that meets the operating-environment requirements.

Was the software installed using the setup program?

Be sure to use the setup program when installing the Dr. STIKA PLUS.

The setup program puts the files for each software package in the necessary locations to enable the software to be used under Windows.

The system hangs (when you're using Windows NT 4.0 with Service Pack 3).

The system may hang when you type in text. This symptom is corrected by Windows NT 4.0 Service Pack 4 and later.

For more information, contact Microsoft.

No squares or triangles (■ and ▲) are displayed around objects.

Depending on the model of computer, squares and triangles (■ and ▲) for manipulating objects may not be displayed. The following two workarounds are available. They affect the entire operating environment of the computer. For information on how to change the settings, also see the help screens for Windows. You can view help for Windows by right-clicking with the mouse in the corresponding dialog box.

1. In Windows, open [Control Panels].
   Double-click [Display] to display [Settings].
   Set [Color] to [256] then click [OK].
2. In Windows, open [Control Panels].
   Double-click [System] to display [Performance].
   Click the [Graphics] button.
   Move the [Hardware acceleration] bar to the left until the square and triangle symbols (■ and ▲) around the objects appear.

Material cannot be cut properly.

Has the blade tip been adjusted?

Check whether the amount of blade extension has been adjusted. For information on how to adjust the amount of blade extension, see "3.1 Adjusting and Replacing the Blade."

If the amount of blade extension is too short for the material
Cut lines may be discontinuous or unattractive, or the cutting results may be misaligned.
Adjust the length of blade extension to be the same as the thickness of the material.

If the amount of blade extension is too long for the material
The material may peel off during cutting.
Shorten the amount of blade extension and change the driver setting to make the cutting speed slower.

Is the blade holder secured in place?

If the blade holder is not secured in place, it may be impossible to cut material.
Install securely so that the screws do not loosen while cutting is in progress.

Is the blade broken?

Cut lines may be discontinuous or unattractive, or the cutting results may be misaligned.
Replace with a new blade.

Is the size of the loaded material set correctly?

Material smaller than the set cutting range has been loaded. Load material that matches the cutting range.

Is the cutting speed correct?

The cutting speed is too fast. Change the driver setting to obtain a slower cutting speed. Please refer to the relevant help screens for the driver to set the cutting speed.

Is the driver for the model you're using installed?

Make sure the driver for the model you're using is installed.
If a driver for an incorrect model is installed, install the correct driver for the model you're using.

When cutting material measuring 500 mm (19-5/8 in.) or more, the material becomes displaced.

When material measuring 500 mm (19-5/8 in.) or more is loaded, then depending on its type, it may become misaligned.
If this happens, then either replace the material with a different type, or reload the material.

Cut lines are partially dotted (discontinuous).

The cause may be any of the follow.

Is the tip of the blade broken?

Replace with a new fresh, then use.

Is there any buildup of dust or material adhesive on the tip of the blade?

If there is buildup of dust or material adhesive, remove the blade and clean the tip.

Are there material scraps inside the blade holder?

Detach the tip of the blade holder and clean out any material inside the blade holder. See "4.4 Cleaning the Blade Holder" for the procedure.

Is the blade protector damaged?

If material is cut correctly even though the blade and blade holder are installed correctly, it means that the blade protector is damaged. Replace with a new blade protector. For information on how to replace it, see "4.1 Replacing the Blade Protector."

Is the blade holder broken or worn?

Replace with a new blade holder.

A message appears on the computer screen.

Is the message "Write error," "Out of paper," or "Timeout error" displayed on the computer screen?

Communication between the SX-15/12/8 and the computer is not correct. Switch off the power to the SX-15/12/8 and the computer, then make sure the cable connections are correct. If you are using a cable switching device, remove the switching device

Is the [Add Printer Wizard] window displayed?

Make sure the SX-15/12/8's driver is installed.
If you connect the SX-15/12/8 to the computer and switch on the power to the SX while the SX driver is not installed on the computer, then when you start Windows, the message [Add Printer Wizard] appears.
Follow the steps below to install the driver.

1. Click [Cancel].
2. Install the driver for the model you're using from the Roland Software Package CD-ROM.
   For information on how to install from the CD-ROM, see "1.4 Installing and Setting Up the Included Software."

4.3 Specifications

Main unit Specification

	SX-15	SX-12	SX-8
Max. cutting area	340 mm (X) x 1000 mm (Y) (13-3/8 in. (X) x 39-5/16 in. (Y))	250 mm (X) x 1000 mm (Y) (9-13/16 in. (X) x 39-5/16 in. (Y))	160 mm (X) x 1000 mm (Y) (6-1/4 in. (X) x 39-5/16 in. (Y))
Acceptable sheet size*	Width : 360 to 381 mm (14-1/8 to 15 in.) Width : 280 to 305 mm (11 to 12 in.) Length : 1100 mm (43-1/4 in.) or less	Width : 280 to 305 mm (11 to 12 in.) Length : 1100 mm (43-1/4 in.) or less	Width : 200 to 215 mm (7-13/16 to 8-7/16 in.) Length : 1100 mm (43-1/4 in.) or less
Cutting speed	12 to 100 mm/sec. (7/16 to 3-7/8 in./sec)	12 to 40 mm/sec. (7/16 to 1-9/16 in./sec)	12 to 40 mm/sec. (7/16 to 1-9/16 in./sec)
Acceptable material	PVC sheet (0.1 mm (0.00394 in.) or less in thickness, 0.3 mm (0.0118 in.) or less in thickness including the backing board).		
Control keys	STANDBY key		
LED	STANDBY LED		
Interface	Parallel (IEEE 1284 compliant: Nibble mode)		
Power consumption	Exclusive AC adapter DC+19V 2.1A		
External dimensions	510 mm (W) x 165 mm (D) x 105 mm (H) (20-1/8 in. (W) x 6-1/2 in. (D) x 4-3/16 in. (H))	430 mm (W) x 165 mm (D) x 105 mm (H) (16-15/16 in. (W) x 6-1/2 in. (D) x 4-3/16 in. (H))	330 mm (W) x 165 mm (D) x 105mm (H) (13 in. (W) x 6-1/2 in. (D) x 4-3/16 in. (H))
Weight (unit only)	3.1 Kg (6.8 lb)	2.6 Kg (5.7 lb)	2.1 Kg (4.6 lb)
Acoustic noise level	60 dB (A) or less (According to ISO 7779)		
Operation temperature	5 to 40 °C (41 to 104 °F)		
Operation humidity	35 to 80 % (no condensation)		
Accessories	AC adapter : 1, Power cord : 1, Ferrite cores : 2, Cable ties (For securing ferrite cores) :2, Blade holder/Blade : 1, Material for test cuts : 1, Application tape for test cuts : 1, Blade protect : 1, Roland Software Package CD-ROM: 1, SX-15/12/8 User's Manual : 1		

*When material having a length of 500 mm (19-5/8 in.) or more is used, then depending on the type of material, it may become misaligned.

Interface Specification

[Parallel]	
Standard	IEEE 1284 compliant: Nibble mode
Input signal	$\overline{\text{STROBE}}$ (1BIT), DATA (8BIT), $\overline{\text{SLCT IN}}$, $\overline{\text{AUTO FEED}}$, $\overline{\text{INT}}$
Output signal	BUSY (1BIT), $\overline{\text{ACK}}$ (1BIT), $\overline{\text{FAULT}}$, SLCT, PERROR
I/O signal level	TTL level
Transmission method	Asynchronous

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